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NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	DEC 01	ChemPort single article sales feature unavailable
NEWS	3	JUN 01	CAS REGISTRY Source of Registration (SR) searching enhanced on STN
NEWS	4	JUN 26	NUTRACEUT and PHARMAML no longer updated
NEWS	5	JUN 29	IMSCOPROFILE now reloaded monthly
NEWS	6	JUN 29	EFFULL adds Simultaneous Left and Right Truncation (SLART) to AB, MCLM, and TI fields
NEWS	7	JUL 09	PATDPAFULL adds Simultaneous Left and Right Truncation (SLART) to AB, CLM, MCLM, and TI fields
NEWS	8	JUL 14	USGENE enhances coverage of patent sequence location (PSL) data
NEWS	9	JUL 27	CA/CAPLUS enhanced with new citing references
NEWS	10	JUL 16	GBFULL adds patent backfile data to 1855
NEWS	11	JUL 21	USGENE adds bibliographic and sequence information
NEWS	12	JUL 28	EFFULL adds first-page images and applicant-cited references
NEWS	13	JUL 28	INPADOCDB and INPAFAMDB add Russian legal status data
NEWS	14	AUG 10	Time limit for inactive STN sessions doubles to 40 minutes
NEWS	15	AUG 18	COMPENDEX indexing changed for the Corporate Source (CS) field
NEWS	16	AUG 24	ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced
NEWS	17	AUG 24	CA/CAPLUS enhanced with legal status information for U.S. patents
NEWS	18	SEP 09	50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY
NEWS	19	SEP 11	WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus
NEWS EXPRESS	MAY 26 09		CURRENT WINDOWS VERSION IS V8.4, AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
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FILE COVERS 1907 - 22 Sep 2009 VOL 151 ISS 13

FILE LAST UPDATED: 21 Sep 2009 (20090921/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

CPlus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CPlus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 9.

=> e dicyanoamide

E1	1	DICYANOALLYLSILOXANE/BI
E2	1	DICYANOAMIDAZIDE/BI
E3	39 -->	DICYANOAMIDE/BI
E4	2	DICYANOAMIDES/BI
E5	7	DICYANOAMIDINE/BI
E6	1	DICYANOAMIDINES/BI
E7	1	DICYANOAMIDINO/BI
E8	10	DICYANOAMIDO/BI
E9	2	DICYANOAMIDOCUPRATE/BI
E10	4	DICYANOAMIDOGEN/BI
E11	30	DICYANOAMIDOGENCUPRATE/BI
E12	1	DICYANOAMIDOGENCUPRATEMONOBROMIDE/BI

=> s e3

39 DICYANOAMIDE/BI

L1 2 DICYANOAMIDES/BI
40 DICYANOAMIDE/BI
((DICYANOAMIDE OR DICYANOAMIDES) /BI)

=> s l1 and electrolyte
292736 ELECTROLYTE
150498 ELECTROLYTES
349561 ELECTROLYTE
(ELECTROLYTE OR ELECTROLYTES)
L2 3 L1 AND ELECTROLYTE

=> d l2 ibib abs 1-3

L2 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:777359 CAPLUS
DOCUMENT NUMBER: 149:249241
TITLE: Tetrahydrothiophenium-Based Ionic Liquids for High Efficiency Dye-Sensitized Solar Cells
AUTHOR(S): Xi, Chengcheng; Cao, Yiming; Cheng, Yueming; Wang, Mingkui; Jing, Xiaoyan; Zakeeruddin, Shaik M.; Gratzel, Michael; Wang, Peng
CORPORATE SOURCE: State Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, 130022, Peop. Rep. China
SOURCE: Journal of Physical Chemistry C (2008), 112(29), 11063-11067
CODEN: JPCCCK; ISSN: 1932-7447
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Binary melts of S-ethyltetrahydrothiophenium iodide and dicyanoamide (or tricyanomethide) have been employed for dye-sensitized solar cells with high power conversion efficiencies up to 6.9% under the illumination of air-mass 1.5G full sunlight. We have further shown that the transport of triiodide in ionic liqs. with high iodide concentration is viscosity-dependent in terms of a phys. diffusion coupled bond exchange mechanism apart from the simple phys. diffusion. In addition, we have found that some anions of ionic liquid electrolytes such as dicyanoamide have a significant influence on surface states and electron transport in the mesoporous semiconducting film.
OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:602639 CAPLUS
DOCUMENT NUMBER: 145:75195
TITLE: Aluminum electrolytic capacitors provided with electrolytic solution containing dicyanoamides and nitro compounds
INVENTOR(S): Matsuda, Akihiro; Ogami, Seitaro; Tani, Tomoyuki; Ito, Tomonori
PATENT ASSIGNEE(S): Nichicon Corp., Japan
SOURCE: Jpn. Kokai Tokyo Koho, 21 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006165001	A	20060622	JP 2004-349327	20041202
PRIORITY APPLN. INFO.:			JP 2004-349327	20041202

OTHER SOURCE(S): MARPAT 145:75195

AB The electrolyte solution provided for the title electrolytic capacitors contains dicyanoamide $R^+-N(C.tplbond.N)_2$ (R^+ = cation) and ≥ 1 nitro compds. The electrolyte solution gives the capacitors low impedance, low equivalent-series resistance, high-temperature durability, and withstand-voltage stability.

L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:239320 CAPLUS

DOCUMENT NUMBER: 142:319814

TITLE: Electrolyte composition and photoelectric converter using the composition

INVENTOR(S): Watanabe, Masayoshi; Kawano, Ryuji; Matsuyama, Chizuru; Matsui, Hiroshi; Tanabe, Nobuo

PATENT ASSIGNEE(S): Fujikura Ltd., Japan

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005024992	A1	20050317	WO 2004-JP13253	20040906
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2005085587	A	20050331	JP 2003-315955	20030908
TW 285437	B	20070811	TW 2004-93126687	20040903
AU 2004303035	A1	20050317	AU 2004-303035	20040906
AU 2004303035	B2	20080410		
CA 2538045	A1	20050317	CA 2004-2538045	20040906
EP 1675211	A1	20060628	EP 2004-772935	20040906
R: AT, CH, DE, LI, NL, SE, FI				
CN 1846328	A	20061011	CN 2004-80025581	20040906
KR 2006063953	A	20060612	KR 2006-704245	20060228
KR 767019	B1	20071015		
US 20080060698	A1	20080313	US 2007-571054	20070514
PRIORITY APPLN. INFO.:			JP 2003-315955	A 20030908
			WO 2004-JP13253	W 20040906

AB The composition contains an ionic liquid, having a dicyanoamide anion as an anion. The converter uses the above composition as an electrolyte. Preferably, the ionic liquid contains a quaternarized N atom as a cation.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

=> s 11 ibib abs 1-40

MISSING OPERATOR L1 IBIB

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> d 11 ibib abs 1-40

L1 ANSWER 1 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:643376 CAPLUS

DOCUMENT NUMBER: 151:101218

TITLE: Synthesis, Structure, and Bonding of Weakly Coordinating Anions Based on CN Adducts

AUTHOR(S): Bernsdorf, Arne; Brand, Harald; Hellmann, Robert; Koeckerling, Martin; Schulz, Axel; Villinger, Alexander; Voss, Karsten

CORPORATE SOURCE: Abteilung Anorganische Chemie, Institut fuer Chemie, Universitaet Rostock, Rostock, 18059, Germany

SOURCE: Journal of the American Chemical Society (2009), 131(25), 8958-8970

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 151:101218

AB The addition of alkali or silver salts of dicyanoamide (dca), tricyanomethanide (tcm) and tetracyanoborate (tcb) to a solution of B(C6F5)3 in di-Et ether affords salts containing very voluminous B(C6F5)3 adduct anions of the type [E(CN)_n]⁻ [B(C6F5)3]_n: E = N (dca_{nb} with n = 1, 2; b = B(C6F5)3); E = C (tcm_{nb} with n = 1, 2, 3), and E = B (tcb_{nb} with n = 1, 2, 3, 4). Salts bearing these anions such as B[(CN)·B(C6F5)3]4⁻ (= [B(CN)4]⁻ [B(C6F5)3]4), C[(CN)·B(C6F5)3]3⁻ (= [C(CN)3]⁻ [B(C6F5)3]3), and N[(CN)·B(C6F5)3]2⁻ (= [N(CN)2]⁻ [B(C6F5)3]2) can be prepared in good yields. They are thermally stable up to over 200° and dissolve in polar organic solvents. Depending on the stoichiometry mono-, di-, tri-, or tetraadduct formation is observed. The solid state structures of dca_{2b}, tcm_{3b} and tcb_{4b} salts show only long cation...anion contacts and thereby weak interactions, large anion vols. and only small distortions of the dca, tcm or tcb core enwrapped between B(C6F5)3 groups. That is why these anions can be regarded as weakly coordinating anions. On the basis of B3LYP/6-31+G(d) computations the energetics, structural trends and charge transfer of the adduct anion formation were studied. Since tcm_{3b} and tcb_{4b} are easily accessible and can also be prepared in large quantities, these anions may be utilized as a true alternative to other widely used weakly coordinating anions. Moreover, for both steric and electronic reasons it seems reasonable to expect that as counterions for cationic early transition metal catalysts such anions may show reduced ion pairing and hence increased catalytic activity.

REFERENCE COUNT: 93 THERE ARE 93 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 2 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:303044 CAPLUS

TITLE: Dicyanoamide: Its role in energetic ionic liquids

AUTHOR(S): Carlin, Caleb M.; Gordon, Mark S.

CORPORATE SOURCE: Department of Physics, Michigan Technological University, Houghton, MI, 49931, USA

SOURCE: Abstracts of Papers, 237th ACS National Meeting, Salt

Lake City, UT, United States, March 22-26, 2009 (2009)
, CHED-946. American Chemical Society: Washington, D.
C.
CODEN: 69LNK5

DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)
LANGUAGE: English

AB Energetic ionic liqs. have drawn increasing interest as candidates for monopropellants with aerospace applications as their relative stability and high energy d. surpass current fuels. The energetic ionic liquid 1,2,4-triazolium dicyanoamide [TZ+/DCA-] is investigated at the second order perturbation (MP2) level of quantum chemical to determine the relative energies of the ion pair (TZ+/DCA-) and the neutral pair (TZ/HDCA), in which a proton has transferred from the cation to the anion. All of these calcs. were completed using the 6-31++G(d,p) basis set implemented in the GAMESS software package. The ionization potential of DCA- is determined using the equation-of-motion ionization potential coupled cluster (EOM-IP-CC) method in Qchem and the completely renormalized coupled cluster with single, double, and triple excitations (CR-CC(2,3)) method in GAMESS, both with the aug-cc-pVTZ basis set.

L1 ANSWER 3 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1026888 CAPLUS

DOCUMENT NUMBER: 149:316766

TITLE: Pyrrolidinium-Based Ionic Liquids. 1-Butyl-1-methyl
Pyrrolidinium Dicyanoamide: Thermochemical
Measurement, Mass Spectrometry, and ab Initio
Calculations

AUTHOR(S): Emel'yanenko, Vladimir N.; Verevkin, Sergey P.;
Heintz, Andreas; Corfield, Jo-Anne; Deyko, Alexey;
Lovelock, Kevin R. J.; Licence, Peter; Jones, Robert
G.

CORPORATE SOURCE: Department of Physical Chemistry, University of
Rostock, Rostock, 18051, Germany

SOURCE: Journal of Physical Chemistry B (2008), 112(37),
11734-11742

CODEN: JPCBFK; ISSN: 1520-6106

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The standard molar enthalpy of formation of the ionic liquid
1-butyl-1-methylpyrrolidinium dicyanoamide has been determined at 298 K by means
of combustion calorimetry, while the enthalpy of vaporization and the mass
spectrum of the vapor (ion pairs) have been determined by
temperature-programmed

desorption and line of sight mass spectrometry. Ab initio calcs. for
1-butyl-1-methylpyrrolidinium dicyanoamide have been performed using the
G3MP2 and CBS-QB3 theory, and the results from homodesmotic reactions are in
excellent agreement with the expts.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 4 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:952616 CAPLUS

TITLE: Dynamics and spectroscopy in room temperature ionic
liquids

AUTHOR(S): Margulis, Claudio J.

CORPORATE SOURCE: Department of Chemistry, University of Iowa, Iowa
City, IA, 52242, USA

SOURCE: Abstracts of Papers, 236th ACS National Meeting,
Philadelphia, PA, United States, August 17-21, 2008

(2008), IEC-166. American Chemical Society:
Washington, D. C.
CODEN: 69KXQ2

DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)
LANGUAGE: English

AB Many recent expts. and our own studies clearly show that for many room-temperature ionic liqs., solvent relaxation at the local environment level does not fully occur on a nanosecond time scale. This is important because it is often the case that photo-excitation and emission of probe mols. dissolved in ionic liqs. happen on this time scale. This slow relaxation is due to the sluggish nature of many of these solvents and because of the hindered nature of the solute rotations. We have performed classical mol. dynamics simulations to obtain the Optical Kerr effect (OKE) spectra of 1-methoxyethylpyridinium dicyanoamide in an ionic liquid previously exptl. studied by Shirota and Castner. The decay of the collective polarizability anisotropy correlation exhibits several different time scales originated from inter- and intra mol. dynamics time scales for orientational relaxation and interaction induced processes. One of the salient features is that collision induced phenomena dominates the spectra on a longer time scale (hundreds of picoseconds) than is observed in most polar liqs. at room temperature

L1 ANSWER 5 OF 40 CAPLUS COPYRIGHT 2009 ACS ON STN

ACCESSION NUMBER: 2008:837880 CAPLUS

DOCUMENT NUMBER: 149:206190

TITLE: Shock wave synthesis and exploration of high-pressure nitrides and related materials

AUTHOR(S): Sekine, Toshimori

CORPORATE SOURCE: Nano Materials Lab, National Institute for Materials Science, Namiki 1-1, Tsukuba, 305-0044, Japan

SOURCE: Materials Research Society Symposium Proceedings (2008), Volume Date 2007, 1040E(Nitrides and Related Bulk Materials), No pp. given, Paper #: 1040-Q05-04
CODEN: MRSPDH; ISSN: 0272-9172
URL: http://www.mrs.org/s_mrs/bin.asp?CID=11340&DID=209722&DOC=FILE.PDF

PUBLISHER: Materials Research Society

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

AB We have successfully developed a method to manufacture spinel-type Si₃N₄ and also a chemical treatment method to sep. the spinel-type phase from the low-pressure phases. Similar methods could be applied for the SiAlON systems. In order to explore high-pressure nitrides and oxynitrides, we extended toward the system Si₃N₄-AlN-Al₂O₃-SiO₂. According to the results of in situ measurements of the high-pressure behavior up to pressures of 200 GPa, there appears to be post-spinel phase in the system. This is consistent with the results from the first principles calcs. However we could not obtain the post-spinel phase by the shock recovery expts. at present. We also carried out shock recovery expts. on carbon nitrides and related materials. Exptl. results showed formation of a new carbon nitride, high stability of melamine up to a shock pressure of 37 GPa, and production of amorphous C-N materials with the highest N/C ration of 1.26 from the reaction between carbon tetrahalide and sodium dicyanoamide. We tried further to extend toward the systems C₃N₄-Si₃N₄ and Mg₂SiO₄-Si₃N₄, after taking into account the results on shock wave synthesis of spinel-type nitrides.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2009 ACS ON STN

ACCESSION NUMBER: 2008:777359 CAPLUS

DOCUMENT NUMBER: 149:249241

TITLE: Tetrahydrothiophenium-Based Ionic Liquids for High Efficiency Dye-Sensitized Solar Cells

AUTHOR(S): Xi, Chengcheng; Cao, Yiming; Cheng, Yueming; Wang, Mingkui; Jing, Xiaoyan; Zakeeruddin, Shaik M.; Gratzel, Michael; Wang, Peng

CORPORATE SOURCE: State Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, 130022, Peop. Rep. China

SOURCE: Journal of Physical Chemistry C (2008), 112(29), 11063-11067
CODEN: JPCCCK; ISSN: 1932-7447

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Binary melts of S-ethyltetrahydrothiophenium iodide and dicyanoamide (or tricyanomethide) have been employed for dye-sensitized solar cells with high power conversion efficiencies up to 6.9% under the illumination of air-mass 1.5G full sunlight. We have further shown that the transport of triiodide in ionic liqs. with high iodide concentration is viscosity-dependent in terms of a phys. diffusion coupled bond exchange mechanism apart from the simple phys. diffusion. In addition, we have found that some anions of ionic liquid electrolytes such as dicyanoamide have a significant influence on surface states and electron transport in the mesoporous semiconducting film.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 7 OF 40 CAPLUS COPYRIGHT 2009 ACS ON STN

ACCESSION NUMBER: 2008:718352 CAPLUS

DOCUMENT NUMBER: 149:208607

TITLE: The influence of electrostatic forces on the structure and dynamics of molecular ionic liquids

AUTHOR(S): Schroeder, C.; Steinhauser, O.

CORPORATE SOURCE: Department of Computational Biological Chemistry, University of Vienna, Vienna, A-1090, Austria

SOURCE: Journal of Chemical Physics (2008), 128(22), 224503/1-224503/7
CODEN: JCPSA6; ISSN: 0021-9606

PUBLISHER: American Institute of Physics

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The vast majority of mol. dynamics simulations are based on nonpolarizable force fields with fixed partial charges for all atoms. The traditional way to obtain these charges are quantum-mech. calcs. performed prior to simulation. Unfortunately, the set of the partial charges heavily relies on the method and the basis set used. Therefore, investigations of the influence of charge variation on simulation data are necessary in order to validate various charge sets. This paper elucidates the consequences of different charge sets on the structure and dynamics of the ionic liquid: 1-ethyl-3-methyl-imidazolium dicyanoamide. The structural features seem to be more or less independent of the partial charge set pointing to a dominance of shape force as modeled by Lennard-Jones parameters. This can be seen in the radial distribution and orientational correlation functions. The role of electrostatic forces comes in when studying dynamical properties. Here, significant deviations between different charge sets can be observed. Overall, dynamics seems to be governed by viscosity. In fact, all dynamical parameters presented in this work can be converted from one charge set to another by viscosity scaling. (c)

2008 American Institute of Physics.

REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 8 OF 40 CAPLUS COPYRIGHT 2009 ACS ON STN

ACCESSION NUMBER: 2008:685803 CAPLUS

DOCUMENT NUMBER: 149:9465

TITLE: Molecular Dynamics Study of the Temperature-Dependent Optical Kerr Effect Spectra and Intermolecular Dynamics of Room Temperature Ionic Liquid 1-Methoxyethylpyridinium Dicyanoamide

AUTHOR(S): Hu, Zhonghan; Huang, Xuhui; Annappareddy, Harsha V. R.; Margulis, Claudio J.

CORPORATE SOURCE: Department of Chemistry, The University of Iowa, Iowa City, IA, 52242, USA

SOURCE: Journal of Physical Chemistry B (2008), 112(26), 7837-7849

CODEN: JPCBFF; ISSN: 1520-6106

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We have performed classical mol. dynamics simulations to calculate the Optical Kerr effect (OKE) spectra of 1-methoxyethylpyridinium dicyanoamide, a room-temperature ionic liquid (IL) which has been recently studied by

Shirota and Castner (Shirota, H.; Castner, E.J. Phys. Chemical A 2005, 109, 9388-9392) in comparison to its neutral isoelectronic solvent mixture. Our theor. and computational studies show that the decay of the collective polarizability anisotropy correlation exhibits several different time scales originating from inter- and intramol. dynamics, in good agreement with expts. What's more, we find that the portion of the collective anisotropic polarizability relaxation due to "interaction-induced" phenomena is important at times much longer than those observed in normal solvents when these are far from their glass transition temperature. From our long (60 ns) mol. dynamics simulations, we are able to determine the appropriate time scales for orientational relaxation and interaction-induced processes occurring in the liquid. We find that the cationic contribution to the OKE signal is predominant. Because of the slow nature of relaxation processes in ILs, these calcns. are very time, memory, and storage intensive. In the context of this research, we have developed a polarizable force field for this system and also theor. methodol. to generate mol. polarizabilities for arbitrarily shaped mols. and ions from corresponding atomic polarizabilities. We expect this methodol. to have an important impact on the speed of mol. dynamics simulations of polarizable systems in the future.

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 9 OF 40 CAPLUS COPYRIGHT 2009 ACS ON STN

ACCESSION NUMBER: 2008:595384 CAPLUS

DOCUMENT NUMBER: 149:12026

TITLE: Preparation and application of guanidine compounds in reverse flotation of bauxite

INVENTOR(S): Zhong, Hong; Liu, Guangyi; Zhao, Shenggui

PATENT ASSIGNEE(S): Central South University, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 9pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101176861	A	20080514	CN 2007-10036184	20071121

PRIORITY APPLN. INFO.: CN 2007-10036184 20071121

OTHER SOURCE(S): MARPAT 149:12026

AB The monoguanidine compound R1(R2)NC(:NH)NH2.(1/n)HnX or diguanidine compound R1(R2)NC(:NH)NHC(:NH)NH2.(2/n)HnX (R1 = C6-20 linear or branched alkyl, cycloalkyl, alkenyl aryl; R2 = H, C1-8 linear or branched alkyl, cycloalkyl, alkenyl, aryl; HnX is inorg. or organic acid; n = 1-3) is used as collector for reverse flotation of bauxite. The title guanidine compound collector has high selectivity and collecting capable to aluminosilicate mineral (such as kaolinite, pyrophyllite, illite) and silicate mineral (such as quartz), and is applied at an ore slurry at pH 3-13 and a dosage of 50-500 g/ton. The monoguanidine compound is prepared from organic amine and monocynoamide in acid medium at 80-150° for 1-5 h without purification. The diguanidine compound is prepared from organic amine and dicyanoamide at 50-100° for 5-15 h in the presence of Cu2+ salt.

L1 ANSWER 10 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:213293 CAPLUS

DOCUMENT NUMBER: 148:313685

TITLE: Capture of Dioxins by Ionic Liquids

AUTHOR(S): Kulkarni, Prashant S.; Branco, Luis C.; Crespo, Joao G.; Afonso, Carlos A. M.

CORPORATE SOURCE: CQFM, Departamento de Engenharia Quimica e Biologica, Instituto Superior Tecnico, Lisbon, 1049-001, Port.

SOURCE: Environmental Science & Technology (2008), 42(7), 2570-2574

CODEN: ESTHAG; ISSN: 0013-936X

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Dioxins are highly toxic compds. mainly originating from incineration and combustion sources. A simple, efficient approach to absorb dioxins from gas streams using thermally-stable ionic liqs. is described. The absorption process of non-chlorinated and chlorinated dibenzo-p-dioxins was studied at 100-200°. Imidazolium-, ammonium-, and guanidinium-based ionic liqs. were designed for this specific purpose. Imidazolium cations with long alkyl side chains exhibited highest absorption capacity; the anion, dicyanoamide [DCA], possessed higher absorption capacity than other studied anions. In a typical experiment, the ionic liquid, 1-n-octyl-3-Me imidazolium dicyanoamide [C8mim][DCA], absorbed >14% by weight of dibenzo-p-dioxin, 2-chlorodibenzo-p-dioxin, and 1,2,3,4-tetrachlorodibenzo-p-dioxin from a gas stream. A desorption process for dioxins from the ionic liquid showed complete desorption can be achieved under a high vacuum. Also, process feasibility was examined by conducting expts. under actual incineration and combustion process operating conditions. Method success heavily relied on design and selection of specific ionic liqs. with enhanced affinity for the aromatic compound functionality present in dioxins and, simultaneously, their extremely low volatility and high chemical and thermal stability.

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 11 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:121932 CAPLUS

DOCUMENT NUMBER: 148:454342

TITLE: Shock wave chemical reactions: Synthesis of carbon

nitrides
 AUTHOR(S): Sekine, Toshimori
 CORPORATE SOURCE: National Institute for Materials Science, Namiki 1-1,
 Tsukuba, 305-0044, Japan
 SOURCE: Materials Science Forum (2008), 566(Explosion, Shock
 Wave and Hypervelocity Phenomena in Materials II),
 125-128
 CODEN: MSFOEP; ISSN: 0255-5476
 PUBLISHER: Trans Tech Publications Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A series of shock recovery expts. up to .apprx.50 GPa were performed on
 reactions to form carbon nitrides. Nitrogen-rich starting materials,
 included a C-N-O amorphous precursor, dicyandiamide, melamine, and a mixture
 of carbon tetrahalide and sodium dicyanoamide, were used and the
 recovered samples were investigated by X-ray diffraction technique,
 elemental anal., transmission electron microscopy and so on. Exptl.
 results showed formation of a new carbon nitride, high stability of
 melamine up to a shock pressure of 37 GPa, and production of amorphous C-N
 materials with a highest N/C ration of 1.26 from the reaction between
 carbon tetrahalide and sodium dicyanoamide. We extended to the
 system C3N4-Si3N4 based on the recent results on synthesis of spinel-type
 nitrides. Shock wave chemical reactions provide a route for synthesizing
 novel materials including not only high-pressure phases but also
 metastable, unique substances.
 REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 12 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:1224251 CAPLUS
 DOCUMENT NUMBER: 148:33368
 TITLE: Comparison of physicochemical properties of new ionic
 liquids based on imidazolium, quaternary ammonium, and
 guanidinium cations
 AUTHOR(S): Kulkarni, Prashant S.; Branco, Luis C.; Crespo, Joao
 G.; Nunes, M. Cristiana; Raymundo, Anabela; Afonso,
 Carlos A. M.
 CORPORATE SOURCE: Departamento de Quimica, FCT-UNL, REQUIMTE, Caparica,
 2829-516, Port.
 SOURCE: Chemistry--A European Journal (2007), 13(30),
 8478-8488
 CODEN: CEUJED; ISSN: 0947-6539
 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB More than 50 ionic liqs. were prepared by using imidazolium, quaternary
 ammonium, and guanidinium cations and various anions. In these series,
 different cationic structures such as 1-benzyl-3-methylimidazolium
 [Bzmin]+, 1,3-dibenzylimidazolium [BzmiBz]+, 1-octyl-3-methylimidazolium
 [C8mim]+, 1-decyl-3-methylimidazolium [C10mim]+, tricaprylmethylammonium
 [Aliquat]+, benzyltriethylammonium [BzTEA]+, phenyltrimethylammonium
 [PhTMA]+, and dimethyldihexylguanidinium [DMG]+ were combined with anions,
 p-toluenesulfonate [TSA]-, dicyanoamide [DCA]-, saccharine
 (2-sulfobenzoic acid imide sodium salt) [SAC]-, trifluoroacetate [TFA]-,
 bis(trifluoromethanesulfonyl)imide [Tf2N]-, trifluoromethanesulfonate
 [TfO]-, and thiocyanate [SCN]-. Important phys. data for these ionic
 liqs. are collated, namely solubility in common solvents, viscosity, d., m.p.
 and water content. Apart from the viscosity, the Newtonian and
 non-Newtonian behavior of these ionic liqs. is also disclosed. Stability
 of these ionic liqs. under thermal, basic, acidic, nucleophilic, and
 oxidative conditions was also studied. The features of the solid-liquid
 phase transition were analyzed, namely the glass transition temperature and the

heat capacity jump associated with the transition from the non-equilibrium glass to the metastable supercooled liquid A degradation temperature of each ionic liquid was also determined Comparisons of the properties of various ionic liqs. were made.

OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
 REFERENCE COUNT: 102 THERE ARE 102 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 13 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:730985 CAPLUS

DOCUMENT NUMBER: 147:119378

TITLE: Thermally hardenable adhesive based on acrylic polymer reacted with hardener for thermostable joint connections and coatings

INVENTOR(S): Ander, Hansjoerg; Fogel, Thomas

PATENT ASSIGNEE(S): Lohmann G.m.b.H. & Co. K.-G., Germany

SOURCE: PCT Int. Appl., 17pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007073826	A1	20070705	WO 2006-EP11608	20061204
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
DE 102005062442	A1	20070705	DE 2005-102005062442	20051227
PRIORITY APPLN. INFO.:			DE 2005-102005062442A	20051227

AB A method for producing thermally hardenable adhesives, especially a bifunctional adhesive system for adhesive strips and/or joint connections or thermostable coatings over molded parts involves a thermal solvent polymerization of a monomer mixture comprising of 10-50 % of ethylhexyl acrylate, 1-10 % of hydroxyethyl acrylate, 1-30 % of isobornyl acrylate, 5-30 % of glycidyl methacrylate, and 10-20 % of hexyl acrylate, with an initiator, and addition of a catalyst/hardener to the polymerization product. Et acetate is used as a solvent for polymerization and azoisobutyronitrile is used as initiator with ammonium toluol sulfonate, such as dicyandiamide and aromatic ureas added as hardeners into solution of formed polymer.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:831596 CAPLUS

DOCUMENT NUMBER: 145:423971

TITLE: Nitrogen-rich carbon nitride materials
shock-synthesized from carbon tetrahalide and sodium
dicyanoamide

AUTHOR(S): Shibata, Kazusato; Sekine, Toshimori

CORPORATE SOURCE: Advanced Materials Laboratory, National Institute for
Materials Science, Ibaraki, 305-0044, Japan

SOURCE: Solid State Communications (2006), 139(10), 501-505
CODEN: SSSCOA4; ISSN: 0038-1098

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Shock reactions between CX4 (X=Br or I) and NaN(CN)2 were investigated to
prepare carbon nitrides. The post shock samples were characterized by the
powder X-ray diffraction (XRD) technique. The XRD spectrum of the product
showed a peak in the range of 0.324-0.336 nm in d-value corresponding to
the (002) basal plane diffraction in graphitic structure. Elemental anal.
(C, H, N, O) of the product showed that the atomic ratio of nitrogen to
carbon (N/C) ranged from 0.38 to 1.3. Anal. of data revealed that the
d-value increased and the nitrogen content decreased with the increase of
the impact velocity.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 15 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:602639 CAPLUS

DOCUMENT NUMBER: 145:75195

TITLE: Aluminum electrolytic capacitors provided with
electrolytic solution containing dicyanoamides
and nitro compounds

INVENTOR(S): Matsuda, Akihiro; Gami, Seitaro; Tani, Tomoyuki; Ito,
Tomonori

PATENT ASSIGNEE(S): Nichicon Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006165001	A	20060622	JP 2004-349327	20041202
PRIORITY APPLN. INFO.:			JP 2004-349327	20041202

OTHER SOURCE(S): MARPAT 145:75195

AB The electrolyte solution provided for the title electrolytic capacitors
contains dicyanoamide R+•-N(C.tplbond.N)2 (R+ = cation) and
≥1 nitro compds. The electrolyte solution gives the capacitors low
impedance, low equivalent-series resistance, high-temperature durability, and
withstand-voltage stability.

L1 ANSWER 16 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:122118 CAPLUS

DOCUMENT NUMBER: 144:193780

TITLE: New pyridinium imine based dyes and their use in
optical layers for optical data recording

INVENTOR(S): Graciet, Jean-Christophe

PATENT ASSIGNEE(S): Clariant International Ltd., Switz.

SOURCE: Eur. Pat. Appl., 13 pp.

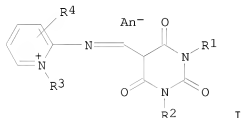
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1624029	A1	20060208	EP 2004-18578	20040805
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
PRIORITY APPLN. INFO.:			EP 2004-18578 20040805	
OTHER SOURCE(S):			CASREACT 144:193780; MARPAT 144:193780	

GI



AB The pyridinium imine can be presented by a formula I, wherein R1, R2 = H, C1-8-alkyl unsubstituted or substituted by C1-4-alkyl, hydroxy, C6-12-aryl or -NR5R6 with R5 and R6 selected from H, C1-8-alkyl or C6-12-aryl; R3 = C1-8-alkyl unsubstituted or substituted by C1-4-alkyl, hydroxy or -NR7R8 with R7 and R8 selected from H, C1-8-alkyl or C6-12-aryl; R4 = H, cyano, halogen, nitro, hydroxy or C1-12-alkyl; An- represents an counter anion selected from inorg. anions such as iodine, fluorine, bromine, perchlorate, hexafluoroantimonate, hexafluorophosphate, tetrafluoroborate, tetraphenylborate, or organic anions such as dicyanoamide or trifluoromethanesulfonimide; An- can also be an anionic azo metal complex based on cobalt metal. Thus, 2-aminopyridine 5, triethylorthoformate 7.9, and barbituric acid 6.8 parts were mixed into 50 parts acetic acid and refluxed for 12 h to give 2-(5-methine-imino-barbituric acid)-pyridine, 1.5 parts of which was mixed with 1.8 parts triethyloxonium tetrafluoroborate in dichloromethane and stirred at 40° for 12 h to give pyridinium tetrafluoroborate salt with 95% yield.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 17 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1059146 CAPLUS

DOCUMENT NUMBER: 144:12083

TITLE: Physical Properties and Intermolecular Dynamics of an Ionic Liquid Compared with Its Isoelectronic Neutral Binary Solution

AUTHOR(S): Shiota, Hideaki; Castner, Edward W., Jr.

CORPORATE SOURCE: Department of Chemistry and Chemical Biology, Rutgers, The State University of New Jersey, Piscataway, NJ, 08854-8087, USA

SOURCE: Journal of Physical Chemistry A (2005), 109(42), 9388-9392

CODEN: JPCAFH; ISSN: 1089-5639

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal
LANGUAGE: English

AB We address the following question about room-temperature ionic liqs. (RTILs). Are the properties of a RTIL more dependent on the charges of the mol. ions or on the fact that the liquid is a complex mixture of two species, one or both of which are asym.. To address this question and to better understand the interactions and dynamics in RTILs, we have prepared the organic ionic liquid (2-methoxyethyl)pyridinium dicyanoamide (MOEPy+/DCA-) and compared this RTIL with the analogous isoelectronic binary solution, comprised of equal parts of (2-methoxyethyl)benzene (MOEBz) and dicyanomethane (DCM). In essence, we have created a RTIL and a nearly identical neutral pair in which we have effectively turned off the charges. To understand the intermol. interactions in both of these liqs., we have characterized the bulk d. and shear viscosity. Using femtosecond optical Kerr effect spectroscopy, we have also characterized the intermol. vibrational dynamics and diffusive reorientation. To verify that the shape, polarizability, and electronic structure of the RTIL ions and the components of the neutral pair are truly quite similar, we have carried out d. functional theory calcns. on the individual mol. ion and neutral species.

OS.CITING REF COUNT: 35 THERE ARE 35 CAPLUS RECORDS THAT CITE THIS RECORD (35 CITINGS)
REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 18 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:444314 CAPLUS

DOCUMENT NUMBER: 143:97068

TITLE: Ultrafast dynamics of pyrrolidinium cation ionic liquids

AUTHOR(S): Shirota, Hideaki; Funston, Alison M.; Wishart, James F.; Castner, Edward W., Jr.

CORPORATE SOURCE: Department of Chemistry & Chemical Biology, Rutgers, The State University of New Jersey, Piscataway, NJ, 08854-8087, USA

SOURCE: Journal of Chemical Physics (2005), 122(18), 184512/1-184512/12
CODEN: JCPSA6; ISSN: 0021-9606

PUBLISHER: American Institute of Physics

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We have investigated the ultrafast mol. dynamics of five pyrrolidinium cation room temperature ionic liqs. using femtosecond optical heterodyne-detected Raman-induced Kerr effect spectroscopy. The ionic liqs. studied are N-butyl-N-methylpyrrolidinium bis(trifluoromethylsulfonyl)imide (P14+/NTf2-), N-methoxyethyl-N-methylpyrrolidinium bis(trifluoromethylsulfonyl)imide (P1EOM+/NTf2-), N-ethoxyethyl-N-methylpyrrolidinium bis(trifluoromethylsulfonyl)imide (P1EOE+/NTf2-), N-ethoxyethyl-N-methylpyrrolidinium bromide (P1EOE+/Br-), and N-ethoxyethyl-N-methylpyrrolidinium dicyanoamide (P1EOE+/DCA-). For comparing dynamics among the five ionic liqs., we categorize the ionic liqs. into two groups. One group of liqs. comprises the three pyrrolidinium cations P14+, P1EOM+, and P1EOE+ paired with the NTf2- anion. The other group of liqs. consists of the P1EOE+ cation paired with each of the three anions NTf2-, Br-, and DCA-. The overdamped relaxation for time scales longer than 2 ps has been fit by a triexponential function for each of the five pyrrolidinium ionic liqs. The fast (.apprx.2 ps) and intermediate (.apprx.20 ps) relaxation time consts. vary little among these five ionic liqs. However, the slow relaxation time constant correlates with the viscosity. Thus, the Kerr spectra in the range from 0 to 750 cm-1 are quite similar for the group of three pyrrolidinium ionic

liqs. paired with the Ntf2- anion. The intermol. vibrational line shapes between 0 and 150 cm⁻¹ are fit to a multimode Brownian oscillator model; adequate fits required at least three modes to be included in the line shape.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
 REFERENCE COUNT: 107 THERE ARE 107 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 19 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:239320 CAPLUS
 DOCUMENT NUMBER: 142:319814
 TITLE: Electrolyte composition and photoelectric converter using the composition
 INVENTOR(S): Watanabe, Masayoshi; Kawano, Ryuji; Matsuyama, Chizuru; Matsui, Hiroshi; Tanabe, Nobuo
 PATENT ASSIGNEE(S): Fujikura Ltd., Japan
 SOURCE: PCT Int. Appl., 17 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005024992	A1	20050317	WO 2004-JP13253	20040906
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2005085587	A	20050331	JP 2003-315955	20030908
TW 285437	B	20070811	TW 2004-93126687	20040903
AU 2004303035	A1	20050317	AU 2004-303035	20040906
AU 2004303035	B2	20080410		
CA 2538045	A1	20050317	CA 2004-2538045	20040906
EP 1675211	A1	20060628	EP 2004-772935	20040906
R: AT, CH, DE, LI, NL, SE, FI				
CN 1846328	A	20061011	CN 2004-80025581	20040906
KR 2006063953	A	20060612	KR 2006-704245	20060228
KR 767019	B1	20071015		
US 20080060698	A1	20080313	US 2007-571054	20070514
PRIORITY APPLN. INFO.:			JP 2003-315955	A 20030908
			WO 2004-JP13253	W 20040906
AB The composition contains an ionic liquid, having a dicyanoamide anion as an anion. The converter uses the above composition as an electrolyte. Preferably, the ionic liquid contains a quaternarized N atom as a cation.				
OS.CITING REF COUNT: 1			THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)	
REFERENCE COUNT: 3			THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT	

L1 ANSWER 20 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:884673 CAPLUS

DOCUMENT NUMBER: 142:67960
 TITLE: Self assembly of a 2D bilayer Cd(II)-organic framework with mixed nicotinate/dicyanoamide ligands
 AUTHOR(S): Luo, Junhua; Jiang, Feilong; Wang, Ruihu; Han, Lei; Lin, Zhenzhong; Cao, Rong; Hong, Maochun
 CORPORATE SOURCE: State Key Laboratory of Structural Chemistry, Fujian Institute of Research on the Structure of Matter, Chinese Academy of Sciences, Fujian, 350002, Peop. Rep. China
 SOURCE: Journal of Molecular Structure (2004), 707(1-3), 211-216
 CODEN: JMOSB4; ISSN: 0022-2860
 PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 142:67960
 AB A novel 2-dimensional bilayer framework [Cd3(NTA)4(Hdca)2(H2O)4]n (1) (Hnta = nicotinic acid, Hdca = dicyanamide) was obtained by slow diffusion of a CdCl2 aqueous solution into a mixture of sodium dicyanamide, Hnta and NaOH aqueous solution in a U-tube. The framework of 1 consists of a mol. ladder containing [Cd6(NTA)6] rectangular metallomacrocycles, and the ladders are further linked by end-to-end dicyanamide bridges to form a unique 2-dimensional bilayer framework. Supramol. organization of $\pi \cdots \pi$ interaction between adjacent layers extends the 2-dimensional bilayer into a 3-dimensional network. Complex 1 is stable up to 315° and exhibits a strong fluorescent emission band at 580 nm (λ_{ex} = 314 nm) in the solid state.
 OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
 REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 21 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:853581 CAPLUS
 DOCUMENT NUMBER: 142:39139
 TITLE: Antiflammable epoxy resin composition for laminating of copper sheet
 INVENTOR(S): Seok, Jae Han; Cho, Sae Hyun
 PATENT ASSIGNEE(S): Kolon Ind. Inc., S. Korea
 SOURCE: Repub. Korea, No pp. given
 CODEN: KRXXFC
 DOCUMENT TYPE: Patent
 LANGUAGE: Korean
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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KR 197945	B1	19990615	KR 1996-49870	19961030
PRIORITY APPLN. INFO.:			KR 1996-49870	19961030

AB A resin composition for flame retardant epoxy copper foil laminate used for a multilayer printed circuit board and containing no halogen is provided which resolves problems of harmfulness by gas generated during burning and metal corrosion by using a phosphorous-based flame retardant in place of conventional halogen-based flame retardant. The resin composition comprises (A) 100g bromine-free bisphenol A type epoxy resin; (B) red phosphor of formula (I) in an amount where a total amount of phosphorous of the epoxy resin becomes 2 to 20%; (C) 0.5 to 20g Dicyanamide curing agent; (D) 0.01 to 3g imidazole curing accelerator; (E) 0 to 150g inorg. flame retardant aid; (F) 1 to 10g flame retardant catalyst; and (G) 0.1 to 3% by weight of a coupling agent based on the inorg. flame retardant aid.

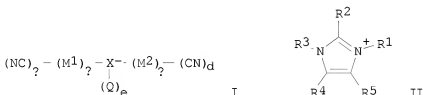
L1 ANSWER 22 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:701133 CAPLUS
 DOCUMENT NUMBER: 141:228098
 TITLE: Pigment sensitized photoelectrochemical cell
 INVENTOR(S): Mizuta, Keiichiro; Nakamura, Junichi
 PATENT ASSIGNEE(S): Nippon Shokubai Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004241378	A	20040826	JP 2004-3974	20040109
EP 1528580	A2	20050504	EP 2004-290090	20040114

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

PRIORITY APPLN. INFO.: JP 2003-7444 A 20030115

GI



AB The title cell contains an ionic material having an anion I [X = B, C, N, O, Al, Si, P, As, and/or Se; M1, M2 = organic linking group; Q = organic group; a (integer) ≥ 1; and b, c, d (integer) ≥ 0]. Preferably, the ionic material contains an onium cation II (R1-5 = organic group; and may bond to each other) and an dicyanoamide anion.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L1 ANSWER 23 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:452153 CAPLUS
 DOCUMENT NUMBER: 142:206671
 TITLE: Optical studies of κ -(ET)2Cu[N(CN)2]Br0.85Cl0.15
 AUTHOR(S): Barz, J.; Dumm, M.; Dressel, M.; Meziere, C.; Batail, P.
 CORPORATE SOURCE: 1. Physikalisches Institut, Universitaet Stuttgart, Stuttgart, D-70550, Germany
 SOURCE: Journal de Physique IV: Proceedings (2004), 114(ISC0M 2003, Fifth International Symposium on Crystalline Organic Metals, Superconductors and Ferromagnets, 2003), 289-290
 CODEN: JPICE1; ISSN: 1155-4339
 PUBLISHER: EDP Sciences
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The low-temperature ground states of the quasi two-dimensional layered organic charge transfer salts κ -(ET)2Cu[N(CN)2]Br1-xClx are known to be strongly dependent on the Br/Cl content of the anions. At low temps., pure Cl compds. undergo a phase transition into an antiferromagnetic

ground state while the pure Br compound is a organic superconductor. Here the authors present polarized IR reflectivity measurements on the compound with 85% bromine and 15% chlorine. Measurements were performed within the highly conducting a-c plane. From room temperature down to 90 K, the authors observe the typical signatures of a semiconductor in spectra. When the sample is cooled down further, a significant amount of spectral weight is shifted towards lower frequencies. At 6 K, a Drude-like optical conductivity is observed in the far IR.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 24 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1998:716110 CAPLUS
 DOCUMENT NUMBER: 130:19565
 TITLE: Multilayer printed circuit boards
 INVENTOR(S): Mikado, Yukinobu
 PATENT ASSIGNEE(S): Ibiden Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10294568	A	19981104	JP 1997-114169	19970417
PRIORITY APPLN. INFO.:			JP 1997-114169	19970417

AB The interlayer insulator films of the circuit boards contain, 1 - 100 weight%, non-conductive reductive compds. containing cyano groups such as dicyanoamides. The insulator films can prevent swallowing due to moisture or peeling of internal circuit layers.

L1 ANSWER 25 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1994:191751 CAPLUS
 DOCUMENT NUMBER: 120:191751
 ORIGINAL REFERENCE NO.: 120:33947a, 33950a
 TITLE: On the ambident coordination behavior of cyanide substituted, singly charged amide and methanide ions
 AUTHOR(S): Jaeger, L.
 CORPORATE SOURCE: Inst. Gen. Inorg. Chem., Martin-Luther-Univ., Halle/Saale, D-O-4010, Germany
 SOURCE: Conference on Coordination Chemistry (1993), 14th(Contributions to Development of Coordination Chemistry), 205-10
 CODEN: PCCHDB; ISSN: 0139-9535
 DOCUMENT TYPE: Journal; General Review
 LANGUAGE: English
 AB A review with 19 refs. The synthesis of cyanamido and dicyanomethanido carboxylates, phosphinates or sulfonates, resp. is described. These singly charged anions show in their chemical behavior distinct parallels to the nonlinear pseudohalides dicyanoamide and tricyanomethanide. One feature of these species, observed in organometal derivs. and transition metal complexes is the favorite coordination via the terminal nitrogen atoms. In dependence on the character of the central atom, nitrogen or sulfur bonded isomers were formed. The structures of the new compds. were determined by means of NMR or x-ray investigations, resp.

L1 ANSWER 26 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1994:67085 CAPLUS
 DOCUMENT NUMBER: 120:67085

ORIGINAL REFERENCE NO.: 120:11905a,11908a
 TITLE: Magnetic-field-induced transition to resistive phase in superconducting κ -(BEDT-TTF) $2\text{Cu}[\text{N}(\text{CN})_2]\text{Cl}$
 AUTHOR(S): Sushko, Yuri V.; Ito, Hiroshi; Ishiguro, Takehiko; Horiuchi, Sachio; Saito, Gunji
 CORPORATE SOURCE: Dep. Phys., Kyoto Univ., Kyoto, 606-01, Japan
 SOURCE: Journal of the Physical Society of Japan (1993), 62(10), 3372-75
 CODEN: JUPSAU; ISSN: 0031-9015
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Application of a high magnetic field to the pressure-stabilized superconducting state appearing below T_{c1} in κ -(BEDT-TTF) $2\text{Cu}[\text{N}(\text{CN})_2]\text{Cl}$ enhances/induces a resistive ground state below T_{c2} ($<T_{c1}$). The resistivity in the field-induced phase is insensitive to temperature variation. The field-induced transition is also characterized by a marked resistivity vs. field hysteresis and by a pronounced long-time dependence.
 OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)

L1 ANSWER 27 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1993:115573 CAPLUS
 DOCUMENT NUMBER: 118:115573
 ORIGINAL REFERENCE NO.: 118:19901a,19904a
 TITLE: A linkage isomeric pair of bis(dicyanoamido) bis(imidazole)copper(II) complexes with considerably different magnetic properties
 AUTHOR(S): Mrozinski, Jerzy; Hvastijova, Maria; Kohout, Jiri
 CORPORATE SOURCE: Inst. Chem., Wroclaw Univ., Wroclaw, 50 383, Pol.
 SOURCE: Polyhedron (1992), 11(22), 2867-71
 CODEN: PLYHDE; ISSN: 0277-5387
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Two isomeric (α and β) $\text{Cu}[\text{N}(\text{CN})_2]_3\text{L}_2$ (L = imidazole) were prepared and studied by IR, far-IR, electronic, ESR spectra, and by temperature-dependent (≥ 4.2 K) magnetic susceptibility measurements. A 6-coordinate polymeric chain structure is assumed with different bridging functions of the $\text{N}(\text{CN})_2$ group, viz. through both cyanide N atoms and through amide and cyanide N atoms in the α - and β -isomers, resp. The temperature-dependent magnetic behavior at ≥ 15.7 K for both isomers is typical for intramol. antiferromagnets with $J \approx -1.6$ (α -isomer) or -6.2 cm $^{-1}$ (β -isomer). At < 15.7 K the magnetic systems show different long-range ordering, antiferromagnetic in the β - but ferromagnetic in the α -isomer.
 OS.CITING REF COUNT: 34 THERE ARE 34 CAPLUS RECORDS THAT CITE THIS RECORD (34 CITINGS)

L1 ANSWER 28 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1992:142639 CAPLUS
 DOCUMENT NUMBER: 116:142639
 ORIGINAL REFERENCE NO.: 116:23846h,23847a
 TITLE: New compounds, coligand, distortion and configuration isomers isolated from metal ion systems with pseudohalides and halopyrazoles
 AUTHOR(S): Hvastijova, M.; Kohout, J.; Pechackova, D.; Koehler, H.
 CORPORATE SOURCE: Dep. Inorg. Chem., Slovak Tech. Univ., Bratislava, 812 37, Czech.
 SOURCE: Conference on Coordination Chemistry (1991), 13th, 91-6
 CODEN: PCCHDB; ISSN: 0139-9535

DOCUMENT TYPE: Journal
LANGUAGE: English

AB From the systems MII-X--L (M = Cu, Ni, Co; X = NCO, N(CN)2, C(CN)3; and L = 4-chloro-, 4-bromo-, 4-iodopyrazole), MX2L2 and M(L.X)2 were prepared. Compds. M(L.X)2 are formed by nucleophilic addition of imine nitrogen from the halopyrazole to the cyanate carbon or to one cyanide carbon of the nonlinear pseudohalide. New cases of coligand distortion and configuration isomers were presented. All compds. were studied by IR and electronic spectroscopy and probably structures were assigned to the relevant complexes.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L1 ANSWER 29 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1992:83394 CAPLUS

DOCUMENT NUMBER: 116:83394

ORIGINAL REFERENCE NO.: 116:14187a,14190a

TITLE: Preparation of phenylbiguanide derivatives as biocides

INVENTOR(S): Olstein, Alan D.

PATENT ASSIGNEE(S): H.B. Fuller Licensing and Financing, Inc., USA

SOURCE: Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

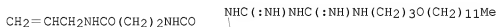
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 456093	A2	19911113	EP 1991-107019	19910430
EP 456093	A3	19920108		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 04026668	A	19920129	JP 1990-266545	19901005
PRIORITY APPLN. INFO.:			US 1990-521375	A 19900510
OTHER SOURCE(S):	MARPAT 116:83394			

GI



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AB Title compds. AQNYC(:NH)NYC(:NH)NYR [A = H, HO, H2N, CH2:CH2, T(CH2CH2O)q(OCHMeCH2)p(OCH2CHMe)m(OCH2CH2)n, an amine protein linkage, an amine saccharide linkage, polyhydroxyamine linkage, XO2C, X = H, R2R1N, R1, R2 = H, alkyl, amino alc., etc.; Q = phenylene; Y = H, Me; R = CF3(CF2)y, y = 1-20, H2x+1CxO(CH2)x, wherein x = 1-25, etc.; T = H, C1-20 alkyl, n, m, p, q = 0-99], are prepared 4-(HO2CCH2CH2NHCO)C6H4NHC(:NH)NHC(:NH)NH(CH2)11Me (preparation given) in MeOH was added to DCC and H2C:CHCH2NH2 to give biguanide derivative I. I showed MIC of 10-50 ppm against Staphylococcus aureus, Candida albicans, etc.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L1 ANSWER 30 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1989:559033 CAPLUS

DOCUMENT NUMBER: 111:159033
 ORIGINAL REFERENCE NO.: 111:26443a,26446a
 TITLE: Lubricant mixture for glass fibers
 INVENTOR(S): Sokolinskaya, M. A.; Makhova, M. F.; Pervak, I. G.;
 Zabava, L. K.; Tutakov, O. V.; Dzhigiris, D. D.;
 Medvedev, A. A.; Kibol, V. F.; Semenovich, G. M.;
 Shadchina, Z. M.
 PATENT ASSIGNEE(S): Institute of Problems in Material Management, Academy
 of Sciences, Ukrainian S.S.R., USSR
 SOURCE: U.S.S.R. From: Otkrytiya, Izobret. 1989, (25), 101.
 CODEN: URXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 1491828	A1	19890707	SU 1987-4233784	19870422
PRIORITY APPLN. INFO.:			SU 1987-4233784	19870422

AB The fiber strength and heat resistance are increased when the textile lubricant mixture contains 1.6-2.0% alkyd resin, in addition to dicyanoamide-formaldehyde resin 0.1-0.5, dimethylsiloxane-polymethylsiloxane copolymer (as organosilicon compound) 1.0-3.0, silicic acid sol (as SiO₂) 0.02-0.40%, and the balance water.

L1 ANSWER 31 of 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1986:602128 CAPLUS
 DOCUMENT NUMBER: 105:202128
 ORIGINAL REFERENCE NO.: 105:32435a,32438a
 TITLE: Kinetics of ligand substitution in platinum(II) complexes: a study on the concept of nucleophilic discrimination

AUTHOR(S): Becker, M.; Elias, H.
 CORPORATE SOURCE: Eduard-Zintl-Inst., Tech. Hochsch. Darmstadt,
 Darmstadt, D-6100, Fed. Rep. Ger.

SOURCE: Inorganica Chimica Acta (1986), 116(1), 47-62
 CODEN: ICHAA3; ISSN: 0020-1693

DOCUMENT TYPE: Journal
 LANGUAGE: English

AB [Pt(OND)X] (HOND = tridentate Schiff bases N-(2-diethylaminoethyl)salicylaldehyde (D = NEt₂), N-(2-ethylaminoethyl)salicylaldehyde (D = NHet) and N-(3-thiapentyl)salicylaldehyde (D = SET); X = Cl, NO₃) were prepared and characterized. As shown by conductimetric studies [Pt(OND)NO₃] aquate in MeOH to give [Pt(OND)(H₂O)]⁺ and NO₃⁻. Spectrophotometry (normal and stopped-flow) was used to study the kinetics of solvent substitution according to [Pt(OND)(H₂O)]⁺ + Y .dblharw. [Pt(OND)Y]⁺ + H₂O with a variety of neutral and ionic nucleophiles Y in MeOH at 20° and constant ionic strength, I = 0.2M (NaClO₄). The substitution follows a 1-term rate law, v = kobs[Pt(OND)(H₂O)] = kY[Y][Pt(OND)(H₂O)]. The kY data obtained for 13 (D = NEt₂) and 7 (D = NET; SET) different nucleophiles Y cannot be adequately correlated with their nPtO values according to the well-known relationship log kY = snPtO + log kS. The deviations are strongest for large and bulky nucleophiles such as Y = Ph₃P, Bu₃P, Ph₃As, I⁻ and for D = NEt₂, from which it is concluded that steric crowding hinders the formation of the 5-coordinate transition state. The rate reducing steric cis-effect observed is of the order kY(D = NET₂):kY(D = NHet):kY(D = SET) = 1:35:63 for small nucleophiles Y and as large as 1:192:2640 for Y = Ph₃P. The introduction of substituents X in the salicylaldehyde ring in ortho (X₃), meta (X₄) and para position (X₅) to the phenolic O proves the existence of rather small electronic effects

(X4, X5) and much stronger steric effects of bulky substituents X3, neighboring the donor O. With the standard substrate trans-[PtPy2Cl2] some new nPt0 values were determined, namely for N,N'-dimethylthiourea (nPt0 = 7.02), N,N'-diphenylthiourea (nPt0 = 7.19), N,N,N',N'-tetramethylthiourea (nPt0 = 6.05) and for the pseudo-halide dicyanoamide ion, N(CN)2- (nPt0 = 3.05). The nPt0 value for the pseudo-halide tricyanomethanide ion, C(CN)3-, was estimated to be 3.03.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L1 ANSWER 32 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1985:504579 CAPLUS
DOCUMENT NUMBER: 103:104579
ORIGINAL REFERENCE NO.: 103:16737a,16740a
TITLE: Bisbiguanide compounds
INVENTOR(S): Eakin, Murdoch Allan; Edwards, Philip Neil; Large, Michael Stewart
PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK
SOURCE: Eur. Pat. Appl., 28 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 125092	A1	19841114	EP 1984-302928	19840501
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 4670592	A	19870602	US 1984-607702	19840507
JP 59231062	A	19841225	JP 1984-91181	19840509
PRIORITY APPLN. INFO.:			GB 1983-12663	A 19830509

OTHER SOURCE(S): MARPAT 103:104579

AB About 30 title compds. R1R2NC:(NR6)NHC:(NH)NHCH2Q(CH2)3NHC:(NH)NHC:(NR7)NR 3R4 or their tautomers [R1-R4 = H, alkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, (un)substituted Ph or phenylalkyl; R1R2N or R3R4N = 1-azetidiny, 1-pyrrolidinyl, piperidino, etc.; R6, R7 = H, alkyl; Q = substituted ethylene or ethylidene group CH2CHYR5, CH(CH2YR5) where Y = O, S and R5 = alkyl, cycloalkyl, cycloalkylalkyl, (un)substituted Ph or phenylalkyl], bactericides, fungicides, and contraceptives (no data), were prepared. Thus, treating 2-hexenedinitrile with PhCH2SH in the presence of NaH, followed by reduction with BH3-Me2S gave 6-(benzylthio)hexane-1,6-diamine dihydrochloride. The last was treated with 1-butyl-3-cyanoguanidine in sulfolane to give 3-(benzylthio)hexane-1,6-bis(5-butylbiguanide) dihydrochloride.

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L1 ANSWER 33 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1985:142236 CAPLUS
DOCUMENT NUMBER: 102:142236
ORIGINAL REFERENCE NO.: 102:22193a,22196a
TITLE: New pseudohalomercurates(II)
AUTHOR(S): Koehler, Helmut; Skirl, Renate; Jeschke, Manuela
CORPORATE SOURCE: Sekt. Chem., Martin-Luther-Univ., Halle/Saale, DDR-4020, Ger. Dem. Rep.
SOURCE: Zeitschrift fuer Chemie (1984), 24(12), 444-5
CODEN: ZECEAL; ISSN: 0044-2402
DOCUMENT TYPE: Journal
LANGUAGE: German
AB [Ph4Z]2[HgCl4] (Z = P, As) reacted with AgX (X = N(CN)2, C(CN)3) in CH3CN to give [Ph4Z]2[HgX4] that were characterized by IR spectra.

L1 ANSWER 34 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1981:21236 CAPLUS
 DOCUMENT NUMBER: 94:21236
 ORIGINAL REFERENCE NO.: 94:3461a,3464a
 TITLE: Spectrographic study of some neodymium pseudohalide complexes
 AUTHOR(S): Kapshuk, A. A.; Ternovaya, T. V.; Skopenko, V. V.; Kostromina, N. A.
 CORPORATE SOURCE: Kiev. Gos. Univ., Kiev, USSR
 SOURCE: Ukrainskii Khimicheskii Zhurnal (Russian Edition) (1980), 46(11), 1125-8
 CODEN: UKZHAI; ISSN: 0041-6045
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB Complexing of Nd³⁺ with C(CN)₃⁻ and N(CN)₂⁻ was studied spectrophotometrically at 20° and ionic strength 0.16 or 0.8. Stability consts. for the 1:1 complexes formed in MeOH are 1.1 ± 0.1, 0.52 ± 0.02 for Nd(CN)₃²⁺ at ionic strengths 0.16, 0.8, resp., and 1.35 ± 0.05 for Nd(N(CN)₂)₂⁺ at ionic strength 0.16.

L1 ANSWER 35 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1977:177635 CAPLUS
 DOCUMENT NUMBER: 86:177635
 ORIGINAL REFERENCE NO.: 86:27819a,27822a
 TITLE: A comparative ab initio study of the dicyanomethanide, cyanonitromethanide, dicyanamide and cyanonitramide anions
 AUTHOR(S): Jensen, Harald; Klewe, Bernt; Tjeltna, Egil
 CORPORATE SOURCE: Dep. Chem., Univ. Oslo, Oslo, Norway
 SOURCE: Acta Chemica Scandinavica, Series A: Physical and Inorganic Chemistry (1977), A31(2), 151-4
 CODEN: ACAPCT; ISSN: 0302-4377
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Results from geometry optimizations by use of ab initio methods and a double zeta basis set give results in good accordance with exptl. findings for these 4 systems. The agreement in the trends when comparing effects of substitution is excellent. Neither optimization with a minimal basis nor MINDO/3 calcns. reproduce geometries for systems like the present ones satisfactorily. The anion bond parameters are discussed in terms of qual. bond concepts.

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L1 ANSWER 36 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1975:454628 CAPLUS
 DOCUMENT NUMBER: 83:54628
 ORIGINAL REFERENCE NO.: 83:8591a,8594a
 TITLE: Bactericidal, insecticidal, or fungicidal mixtures and their incorporation into smoke
 INVENTOR(S): Radulescu, Tudor
 PATENT ASSIGNEE(S): Laboratoire de Chimie et de Biologie "L.C.B", Fr.
 SOURCE: Ger. Offen., 13 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DE 2439920	A1	19750306	DE 1974-2439920	19740820
FR 2302036	A1	19760924	FR 1973-31007	19730827
FR 2302036	B1	19790126		
FR 2260292	A1	19750905	FR 1974-4811	19740213
GB 1454235	A	19761103	GB 1974-11325	19740314
AU 7472435	A	19760219	AU 1974-72435	19740816
US 3956849	A	19760518	US 1974-498136	19740816
CH 591808	A5	19770930	CH 1974-11388	19740820
JP 50070530	A	19750612	JP 1974-97579	19740827
JP 57047886	B	19821013		

PRIORITY APPLN. INFO.:

FR 1973-31007	A	19730827
FR 1974-4811	A	19740213

AB After ignition, 10% SiO₂ [7440-21-3] catalyzes exothermic reaction of a dicyanodiamide-NH₄NO₃ mixture, resulting in an effective smoke generation without addnl. fuel. The effect might be used for formulating smoke-generating pesticidal composition. Thus, a mixture of 36% dicyanodiamide, 54% NH₄NO₃, and 10% SiO₂ was converted into 80.5% smoke, after ignition.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L1 ANSWER 37 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1974:562793 CAPLUS
 DOCUMENT NUMBER: 81:162793
 ORIGINAL REFERENCE NO.: 81:25099a,25102a
 TITLE: Cadmium pseudohalide and benzimidazole coordination compounds
 AUTHOR(S): Skopenko, V. V.; Zub, Yu. L.; Tryashin, A. S.; Garnovskii, A. D.; Gilyanovskii, P. V.
 CORPORATE SOURCE: Kiev. Gos. Univ. im. Shevchenko, Kiev, USSR
 SOURCE: Ukrainskii Khimicheskii Zhurnal (Russian Edition) (1974), 40(9), 920-3
 CODEN: UKZHAI; ISSN: 0041-6045
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian

AB From MeOH solution, 1:2 from Cd thiocyanate, selenocyanate, and dicyanoamide complexes with benzimidazole and 2-methylbenzimidazole were precipitated. With 1,2-dimethylbenzimidazole (I), Cd(NSC₂)₂ formed a 1:1 complex, the other 2 Cd compds. formed 1:2. The ir spectra indicate the presence of bridging CNS-, CNS₂-, and N(CN)₂-groups in the compds. involving I. The uv spectra differ only slightly from those of the ligands and the luminescence in the solid state is very weak.

L1 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1964:490031 CAPLUS
 DOCUMENT NUMBER: 61:90031
 ORIGINAL REFERENCE NO.: 61:15644a-b
 TITLE: Transition metal compounds containing the tricyanomethanide ion
 AUTHOR(S): Enemark, J. H.; Holm, R. H.
 CORPORATE SOURCE: Harvard Univ.
 SOURCE: Inorganic Chemistry (Washington, DC, United States) (1964), 3(11), 1516-21
 CODEN: INOCJ; ISSN: 0020-1669
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable

AB The phys. properties of 5 transition metal tricyanomethanide compds. of the type M(CN)₃·2xH₂O (M = Mn, Fe, Co, Ni, Cu) were investigated in an attempt to deduce the coordination symmetry of the cations and the structure of the anion in these salts. Magnetic and ligand field spectral results are strongly suggestive of weak field, approx. octahedral coordination in each case. The infrared results indicate cation-anion interaction through N producing a site symmetry lower than the intrinsic

D3h symmetry of the free anion, but cannot be interpreted in terms of a significant distortion of the anion from planarity. A polymeric structure is proposed which is consistent with the spectral results and insolubility of these compounds. The nonlinear structure of the dicyanoamide ion, $\text{N}(\text{CN})_2^-$, is confirmed by Raman spectroscopy. The electronic structures of $\text{C}(\text{CN})_3^-$ and $\text{N}(\text{CN})_2^-$ were investigated by using the extended Hückel theory.

OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L1 ANSWER 39 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1919:14830 CAPLUS
DOCUMENT NUMBER: 13:14830
ORIGINAL REFERENCE NO.: 13:29501,2951a-d
TITLE: Decomposition of cyanamide and dicyanodiamide in the soil
AUTHOR(S): Cowie, G. A.
CORPORATE SOURCE: Rothamsted
SOURCE: Expt. Sta. J. Agr. Sci. (1919), 9, 113-37
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Pot expts. were carried out with Rothamsted and Woburn soils to which had been added: CNNH_2 , dicyanodiamide, $(\text{NH}_4)_2\text{SO}_4$, dried blood, and dicyanodiamide + each of the other fertilizers, the expts. covering a period of 35 to 162 days, and at intervals analyses were made for NO_3 and NH_3 . Cyanamide used alone was found to change quant. to NO_3 in about 80 days, the nitrification being almost parallel to that of $(\text{NH}_4)_2\text{SO}_4$, although at first slightly slower, due probably to the fact that the CNNH_2 was first changed to NH_3 . Dicyanodiamide alone remained practically unchanged, and when mixed with the other fertilizers it very greatly inhibited nitrification and caused the accumulation of large amounts of NH_3 . Mustard and barley grown in pots of soil similarly fertilized with CNNH_2 , dicyanodiamide, $(\text{NH}_4)_2\text{SO}_4$, and CNNH_2 + dicyanodiamide showed a growth corresponding almost exactly with the NO_3 produced in the unplanted pots, except where dicyanodiamide had been added to CNNH_2 , the growth here being somewhat greater in proportion to the nitrates formed, due apparently to the direct absorption of NH_3 by the plants on account of the scarcity of NO_3 . Dicyanodiamide applied alone and also mixed with CNNH_2 was toxic to mustard and somewhat less so to barley, while when applied in very small amounts it had no effect upon the growth of rye. In no case did it affect germination. The addition of dicyanodiamide to the soil was not found to influence the number of bacteria developing upon gelatin plates. Field tests carried out with barley planted in a soil fertilized with 150 lbs. $(\text{NH}_4)_2\text{SO}_4$ per acre or an equivalent amount of CNNH_2 , or CNNH_2 + dicyanoamide gave results similar to the pot tests except that dicyanodiamide, while neutralizing the good effects of CNNH_2 when applied in large quantities, was not toxic even when applied at the rate of 27 lbs. of N per acre.

L1 ANSWER 40 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1906:153897 CAPLUS
DOCUMENT NUMBER: 0:153897
TITLE: Over the spontaneous formation of dicyanodiamide into the calcium cyanoamide containing fertilizers.
[machine translation]
AUTHOR(S): Perotti, R.
SOURCE: Atti della Accademia Nazionale dei Lincei, Classe di Scienze Fisiche, Matematiche e Naturali, Rendiconti (1906), 15(5), 48-53
From: Chem. Zentr., 1906, I, 1467
CODEN: AANLAW
DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB [Machine Translation of Descriptors]. As well known the lime nitrogen, if it is not particularly kept in dry air, loses NH_3 , in addition a part of the calcium cyanoamide changes into dicyanoamide. Thus a sample lime nitrogen contained 1904 14.6% CN_2Ca in March - according to the method indicated by the author in former times (soluble C.) determines, by the way well worked satisfactorily -, in May 1904 13.3, in October 1904 9.35 and in October 1905 0.8-0.87% CN_2Ca . By extraction with alcohol dicyandiamide, $\text{C}_2\text{H}_4\text{N}_4$, from water or alcohol thin boards or lamella, left itself melting point 205° from the lime nitrogen; isolate, still by the compound the $\text{C}_2\text{H}_4\text{N}_4 \cdot \text{AgNO}_3$ (see BEILSTEIN and GEUTHER, LIEBIGS Ann. 123. 241) one identified. By this transformation of CN_2Ca analysis differences, like due to the investigation, more freshly explain and/or. stored samples to develop, the dicyandiamide with ammoniacal AgNO_3 no precipitation gives will have to take the develop further evaluation of the lime nitrogen than fertilizers also on the possible presence and formation of dicyandiamide consideration, particularly the latter compound does not know.

=> file logoff

'LOGOFF' IS NOT A VALID FILE NAME

SESSION CONTINUES IN FILE 'CAPLUS'

Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered.

=> logout

LOGOUT IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:n

=>